

a second atomic layer doping region for diffusing said first dopant species in  
said first substrate, said first and second doping regions being chemically isolated  
from one another by an inert gas curtain; and

a loading assembly for moving said first substrate from said first doping  
region to said second doping region, thereby enabling deposition of a first atomic  
monolayer in said first doping region, followed by diffusion of said first atomic  
monolayer in said second doping region.

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